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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/713,260	11/17/2003	Yuzo Goto	0425-1092P	4778

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EXAMINER
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GOODEN JR, BARRY J

ART UNIT	PAPER NUMBER
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3616

DATE MAILED: 12/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/713,260

Applicant(s)

GOTO, YUZO

Examiner

Barry J. Gooden Jr.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 November 2003.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-6 is/are rejected.  
7) ☒ Claim(s) 4 and 5 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 13 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 3/19/04.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Specification***

1. The disclosure is objected to because of the following informalities:

At page 1, line 9 of the second paragraph under "Technical Field", "for a tubular system, an inflator" should be replaced with "for a tubular system, and an inflator".

At page 1, last line "an side collision" should be replaced with "a side collision".

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 4 and 5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 4 and 5, the phrase "nut-like" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "nut-like"), thereby rendering the scope of the claim(s) unascertainable.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Kakiyama et al., JP Publication 09-104308.

In regards to claims 1-3, Kakiyama et al. show an inflator (16) for an air bag constituted to include:

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an inflator housing (22) which accommodates at least one of a pressurized gas and a gas generating agent which burns to generate a gas;

a gas discharge portion (18) provided with an annular portion formed with plural first gas discharge ports for discharging a gas of the inflator housing (22);

a diffuser member (54, 60) which covers an outer surface of the gas discharge portion (18) and is mounted as a separate member only in the vicinity of the first gas discharge ports;

wherein the diffuser member (54, 60) is provided with a passage forming portion for guiding a gas discharged from the first gas discharge ports in the circumferential direction of the gas discharge portion, between the diffuser member and the gas discharge portion, and one or two or more second gas discharge ports (58, 66), for discharging the gas of the passage in the radial direction of the inflator housing, are formed unevenly on the one portion of the passage forming portion in the circumferential direction;

wherein the passage forming portion of the diffuser portion (54, 60) comprises:

two projecting portions projecting outwardly in the radial direction along the circumferential direction of the gas discharge portion and an annular portion formed integrally between the two projecting portions; and

the second gas discharge ports (58, 66) are formed unevenly on one portion of a peripheral face of the annular portion

wherein a step portion (See Figure 7b) formed along the circumferential direction of the gas discharge portion is provided on an outer peripheral face of the gas discharge portion (18); and

the diffuser member (54, 60) is provided with an engagement portion engaged with the step portion complementarily.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. As best understood, claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kakiyara et al. in view of Ford et al., US Patent 6,846,005 B2.

In regards to claim 4, Kakiyara et al. disclose all of the claimed elements including a projecting portion forming the passage forming portion of the diffuser member, yet excluding an annular portion, extending beyond the passage forming portion, having a nut-like member attached using threads, and thus defining an air bag clamping portion.

Ford et al. teach a diffuser member (82) being formed integrally with an extension portion having an annular portion (26) extending in the axial direction (A) of the gas discharge portion (82) and is threadly attached with a nut-like member (74) on an outer peripheral face of the annular portion (26) of the extension portion, and a space between the nut-like member (74) and the extension portion is defined as an air bag (14) clamping and fixing portion (See Figure 3).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the passage forming portion of Kakiyara et al. in view of the teachings of Ford et al. to include an extension portion having an annular portion and a nut-like member so as to provide an integral means of securably attaching an end of an airbag.

7. As best understood, claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kakiyara et al. in view of Ford et al. as applied to claim 4 above, and further in view of Ogata et al., US Patent 6,860,506 B2.

Kakiyara et al. in view of Ford et al. as applied to claim 4 above teaches all of the claimed elements including a space between the nut-like member and the projecting being defined as an airbag clamping and fixing portion, yet excluding the diffuser member being threadly attached with nut-like members on both sides.

Ogata et al. teach of a diffuser member (45) wherein securing members (55) are located on an outer peripheral face on both sides, in the axial direction, of the second gas discharge ports (49, 50), and a space, between each securing member (55) and a corresponding side of the diffuser member (45), is defined as an air bag (11) clamping and fixing portion (See Figure 3).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the diffuser member of Kakiyama in view of the teachings of Ford et al. and further in view of Ogata et al. to include a diffuser having two nut-like members thereby defining air bag clamping and fixing portions on both sides, in the axial direction, of the diffuser's gas discharge ports so as to provide an integral means of securably attaching both ends of an airbag.

8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kakiyama et al. in view of Katsuda et al., US Patent 6,276,717 B1.

In regards to claim 6, Kakiyama et al. disclose all of the claimed elements, but do not explicitly show an impact sensor, a control unit and an inflator, which receives an activation signal, thereby discharging the gas. These elements are old and well known in the art.

Katsuda et al. teach an air bag apparatus constituted to include an activation signal-outputting means comprising an impact sensor (201) and a control unit (202), an inflator (200) for an air bag (204) which receives an activation signal outputted from the activation signal-outputting means (202) to be activated thereby discharging a gas, and an air bag (204), which is inflated by introducing a gas discharged from the inflator (200) for an air bag (204) therein (column 16, lines 10-21).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the airbag case of Kakiyama et al. in view of the teachings of Katsuda et al. to include an impact sensor, a control unit and an inflator, which receives an activation signal, thereby discharging the gas so as to provide a means for reliable and effective deployment.

### **Conclusion**

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barry J. Gooden Jr. whose telephone number is (571) 272-5135. The examiner can normally be reached on Monday-Friday 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul N. Dickson can be reached on (571) 272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Barry J Gooden Jr.  
Examiner  
Art Unit 3616

BJG

  
ERIC CULBRETH  
PRIMARY EXAMINER